

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-018331**Date Inspected:** 24-Nov-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1200**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** Steven Mc Connel**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Orthotropic Box Girder**Summary of Items Observed:**

Caltrans Office of Structural Material (OSM) Quality Assurance Inspector (QAI) Joselito Lizardo was present at the Self Anchored Suspension (SAS) job site as requested to perform observations on the welding of components for the San Francisco Oakland Bay Bridge (SFOBB) Project.

At OBG 8W/9W bottom plate 'D' inside, QA randomly observed ABF welder Dan Ieraci (ID #3232) perform groove welding complete joint penetration (CJP). The welder was noted utilizing Submerged Arc Welding (SAW) welding root pass to fill pass using F7A6-EM12K-H8, 3.2mm electrode with corresponding Esab OK Flux 10.62 flux and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-4042B-1. The joint being welded has a single V-groove butt joint with backing bar. The splice joint was preheated and maintained to greater than 150 degrees Fahrenheit using Miller Proheat 35 Induction Heating System heater blankets located at the opposite side of the plate prior/during welding. ABF Quality Control (QC) Steven Mc Connell was noted monitoring the welding parameters of the welder. At the end of the shift, fill pass welding of the splice joint at location mentioned above was still continuing and should remain Monday due to the forthcoming holidays.

At OBG 7W/8W side plate 'E' (9955mm to 10555mm) inside, QA randomly observed ABF/JV qualified welder Sungtao, Huang ID # 3794 continuing to perform CJP groove welding fill pass to cover pass on the splice butt joint. The welder was observed welding in the 3G (vertical) position utilizing a Shielded Metal Arc Welding (SMAW) with 1/8" diameter E7018H4R electrode and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-1040A. The joint and location being welded has a single V-groove butt joint with backing bar with limited access to the Bug-o track mounted FCAW-G nozzle holder. The splice joint was

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preheated to remove moisture from the steel plate using propane gas torch prior welding. ABF Quality Control (QC) Steven Mc Connell was noted monitoring the welding parameters of the welder. At the end of the shift, cover pass welding of the splice joint at location mentioned above was completed and the welder started moving their welding equipment to the new location 7W/8W side plate 'C'.

At 7E/8E side plate 'E' outside, QA noted ABF personnel flush grinding the welded reinforcement cover of the splice butt joint. The personnel was using 4 1/2" disc grinder with the direction of the grinding cut to the plate parallel to the direction of the bridge as required. At the other side plate of the same OBG (7E/8E side plate 'C'), welders Rory Hogan and Jeremy Dolman were noted preparing plasma arc gouging machine for the backing bar removal of the joint.

Today at the job site, ABF has a short working day due to the forthcoming holidays.

Summary of Conversations:

No significant conversation today.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact SMR Nina Choy, 510-385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Lizardo, Joselito	Quality Assurance Inspector
Reviewed By:	Levell, Bill	QA Reviewer
